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Electricity and Energy Sector Plan – Discussion paper

The Australian Energy Regulator (AER) welcomes the opportunity to provide a submission to the Electricity and Energy Sector Plan Discussion paper released by the Department of Climate Change, Energy, Environment and Water (DCCEEW).

The energy sector is undergoing a substantial transformation, influenced by the requirement to reduce carbon emissions along with the uptake of consumer energy resources (CER) such as rooftop solar, household batteries, and electric vehicles. This transformation creates opportunities for new investments and business models as well as challenges, such as reliability issues with ageing fossil fuel power plants and coordinating wholesale market entry and exit.

The AER remains focused on protecting vulnerable consumers, while enabling consumers to participate in energy markets. In this regard, we strongly agree with the Discussion paper's framing of having people at the centre of the energy transformation. Our position as the energy regulator, has given us a number of insights into the potential opportunities and challenges that may be faced in the energy transition. We provide some of these for consideration under the relevant chapters of the Discussion paper, below.

Mobilising investment to transform energy

Coal generators have highlighted increasing challenges around plant reliability and planning for maintenance, securing fuel supply at low cost, and funding investment in current and future assets. Recognizing that the timeline for the exit of coal is approaching, it will be important to have transparency and certainty on the orderly exit of fossil fuel generators to provide the required investment. These investment signals should facilitate the development of renewables supported by flexible, dispatchable capacity like batteries, pumped hydro and gas-fired generation along with transmission to maximise benefits for consumers. Many jurisdictions are taking steps to bolster these signals, such as through the development of Renewable Energy Zones, and participation in the Capacity Investment Scheme or other schemes such as Long-Term Energy Service Agreements in NSW.

Reform is needed to meet the broader reliability needs of the system as we transition to net zero emissions. Any such reform will have benefit if it enables revenue confidence, offers clearer timeframes in which to plan maintenance and contract fuel, and incentivises competitive behaviour and effective risk management.

Growing alternative low carbon fuels

The task of decreasing emissions from the gas network can be achieved through a combination of substituting natural gas with a low, or no, emissions alternative like biomethane or 'green hydrogen', and electrification of services such as water heating and cooktops.

While the shift to electrification will be in the best long-term interests of some consumers, it also means that the cost of operating and maintaining the existing gas networks will fall to a decreasing amount of consumers. We are carefully considering the possible future decline of natural gas demand and believe it is important that we start taking small steps now to manage the ongoing costs of maintaining gas networks from what may be a declining customer base over time. Recent decisions we have made to manage this risk include allowing for accelerated depreciation of gas assets to allow those costs to be recovered over larger, existing consumers bases, and working with network businesses to narrow the price gap between temporary and permanent gas disconnection services.

The economic regulatory framework is flexible and allows us to take the steps to manage the risk of this uncertainty over the next 5 years, however in the longer term it may be that the gas access arrangement review process is not enough, or not the best avenue, to deal with the related safety and equity issues that may arise. Policy makers will need to give careful consideration as to whether the current gas regulatory framework, particularly one which is targeted around efficient growth of the service, is still fit for purpose in the energy transition. Additionally, it will be important to ensure that any reform to this framework is equitable for both consumers who chose to disconnect from the gas network, and those who may not be able to.

Maximising outcomes for people and businesses

Facilitating solutions to providing optimal energy outcomes

The AER considers that experimentation in products, services and business models will become increasingly important as the energy transformation progresses. The Energy Innovation Toolkit (EIT) is provided by the Australian Energy Regulator (AER) in partnership with the Australian Energy Market Commission, Australian Energy Market Operator, the Australian Renewable Energy Agency and the Essential Services Commission. Through these partnerships, the EIT promotes and supports innovation that contributes to emissions reduction targets and achieves beneficial outcomes for consumers and businesses. These experiments can assist the Electricity and Energy Sector Plan's aim to maximise outcomes for people and businesses.

Our contact with innovators enables us to contribute to discussions about the future of energy regulation, with focus on the interaction between emerging business models and the existing regulatory framework. Through these conversations we have been kept informed of pressing issues impacting energy industry participants, including electric vehicle charging infrastructure (and particularly metering), access to distribution and transmission networks, limitations in household metering, access to network data, and much more. We expect that continued engagement with these parties can contribute to DCCEEW's objective to maximise outcomes for people and businesses through the Electricity and Energy Sector Plan.

Changes to regulatory settings and market design

The AER fully agrees with the assessment that consumers are at the centre of the energy transformation. As highlighted in the Discussion Paper, consumer trust in a fit-for-purpose energy market is required to drive better coordination of Consumer Energy Resources (CER)

and realise the benefits of CER orchestration for electricity grids. These findings align with the AER's Review of Consumer Protections for Future Energy Services, which highlights the need for regulatory reform to enhance consumer protections for new energy services. Without such reforms, consumers may lack the trust and confidence to support the energy transition. In the review's final advice, the AER recommended expanding the scope of the National Energy Customer Framework to capture new energy services and incorporating a principles-based regulation that provide protections for consumers, while also allowing flexibility for energy sellers. The AER encourages all jurisdictions to progress consideration of this issue so that effective consumer protections can support the wider take-up and effective use of new energy services, driving further innovation and realising the significant benefits that these services bring to the energy transition.

The AER also continues to progress work on other ways to support energy consumers. This includes by progressing key actions under our Towards Energy Equity Strategy including a payment difficulty review and customer engagement toolkit to assist retailers as well as continued engagement with jurisdictions as they consider proposals arising from our game changer initiative.

Consideration of social licence

There is a significant amount of new energy infrastructure that needs to be built in the next decade to connect new renewable capacity to the grid and achieve decarbonisation. The AER considers a vital aspect of this transition if the need for the energy sector needs to build and maintain social licence in delivering this infrastructure, where social licence can be considered as the level of an organisation's acceptance by a community.

The AER is currently considering some aspects of social licence as part of our review of the Cost Benefit Analysis and Regulatory Investment Test Guidelines. The AER is considering both the degree to which social license can impact the selection of a certain transmission route, as well as how companies building transmission infrastructure should identify and engage with stakeholders based on their diverse needs. The AER is supportive of further actions that improve the continuity of community engagement by transmission businesses and AEMO in order to support understanding amongst impacted communities and role in the regulatory process.

It is important that the concerns of communities are reflected in the planning and delivery of major projects and that the energy transition is undertaken at least cost.

We thank DCCEEW for the opportunity to provide this submission and are welcome the opportunity to work closely with DCCEEW on any of the aspects identified above.

Yours sincerely,



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